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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,325	04/05/2001	Ian Karl Jones	713-488	4159

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LOWE HAUPTMAN GILMAN AND BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300 /310
ALEXANDRIA, VA 22314

EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,325

Applicant(s)

JONES, IAN KARL

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-10, 12-14, 16-26 and 29-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-7, 9, 10, 12-14, 16, 19-26, 29-36 and 38-40 is/are rejected.
- 7) ☒ Claim(s) 17, 18 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed June 12, 2003.

Claims 1-4, 11, 15, 27-28 have been cancelled, claims 38-40 were added and claims 5, 7, 9, 10, 12-14, 16-18, 21-26, 29-30, 32 were amended rendering claims 5-10, 12-14, 16-26 and 29-40 pending.

Claim Rejections – 35 USC 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 5-7, 9, 21-26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's amendment of claim 5 shows that the packaging sheet consists of "a single material layer having a repeating pattern." This limitation of the single material layer is considered new matter because neither the specification nor the Figures show where the invention consists of only one layer. Applicant does show on page 3, lines 9-13 that the packaging sheet is formed from a flat sheet of thermoplastic material;

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however. Applicant also shows on page 3, lines 16-18 that this flat sheet is *further* laminated to "a thin sheet of either or both of the front and rear surfaces." Thus, it appears that the packaging sheet consists of *at least two layers*, and not a single layer. Applicant also referred to the material as having upper, middle and lower layers.

Claim Rejections – 35 USC § 103(a)

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-7, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts Jr., U.S. Pat. No. 3,903,342.

6. Roberts Jr. shows a unitary or single ply sheet material (column 5, lines 22-25) where the sheet is used for packaging (column 12, lines 55-62). Roberts Jr. shows the sheet has a pattern (column 2, lines 41-45) and embossed protuberances (column 4, lines 45-60). Roberts Jr. shows a single ply sheet comprising continuous network regions with repeating patterns which are arranged in a manner wherein all lines projected onto the surface of the paper cut through the shaped protuberances and gaps in-between (Figure 5). Roberts Jr. shows the paper has a front surface, a rear surface, and a middle level comprising connecting webs of paper fibers which connect the shaped protuberances (Figures 5-6 and abstract). Roberts Jr. shows that the

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connecting webs extend in lateral and perpendicular directions to the shaped protuberances and form a tessellated pattern (Figure 5). In amended claim 5, the phrase, 'positioned in such a way that every straight line projected onto said sheet cuts through at least one of the shaped protuberances' constitutes a 'capable of' limitation. 'Positioned in such a way' is a recitation that an element is 'capable of' performing a function. This is not a positive limitation but only requires the ability to so perform. Roberts Jr. does not show that the thermoplastic packaging sheet has a compression strength and thickness as in instant claims 22-24. However, such compression strength and thickness are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the compression strength and thickness, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. compression strength and thickness) fails to render claims patentable in the absence of unexpected results. All of the aforementioned limitations are optimizable as they control the resilience, width and spacing of the valleys between the protrusions so that the area available for contact of the active agent with a target surface may be tailored, and the level of cushioning and nesting. As such, they are optimizable. It would have been obvious to one of ordinary skill in the art to make the packaging sheet with the limitations of the compression strength and thickness since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980).

Claim Rejections – 35 USC § 103(a)

7. Claims 10, 12-14, 16, 19-20, 29-36 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudy, U.S. Pat. No. 4,287,250 in view of McGuire et al, U.S. Pat. No. 6,254,965.
8. Rudy shows a thermoplastic packaging sheet comprising repeated patterns (tessellations) of rounded shaped protuberances and gaps which are positioned such that any straight lines projected onto the surface of the paper cut through the shaped protuberances and gaps in-between (Figure 1). The reference shows the sheets are laminated and contain air (column 1, lines 15-24). Rudy shows that the repeating patterns are inverses of each other on the front and rear surfaces and that the contact surface areas of both surfaces are equal (Figures 2 and 3). Rudy shows that the sheet comprises a middle level comprising connecting webs adjacent to the shaped protuberances and that the connecting webs extend laterally and perpendicularly to the shaped protuberances (Figures 1, 3, and 4). Rudy shows that the distance between the front and rear surfaces is less than or equal to about 5 times the thickness of the sheet (Figures 2-3 and 5). In amended claim 5, the phrase, 'positioned in such a way that every straight line projected onto said sheet cuts through at least one of the shaped protuberances' constitutes a 'capable of' limitation. 'Positioned in such a way' is a

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recitation that an element is 'capable of' performing a function. This is not a positive limitation but only requires the ability to so perform. Rudy does not show that the thermoplastic packaging sheet has a compression strength and thickness as in instant claims 19-20, 21, 23-24 and 35-36. However, such compression strength and thickness are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the compression strength and thickness, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. compression strength and thickness) fails to render claims patentable in the absence of unexpected results. All of the aforementioned limitations are optimizable as they control the resilience, width and spacing of the valleys between the protrusions so that the area available for contact of the active agent with a target surface may be tailored, and the level of cushioning and nesting (column 9, lines 45-65). As such, they are optimizable. It would have been obvious to one of ordinary skill in the art to make the packaging sheet with the limitations of the compression strength and thickness since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980). Rudy does not show that the gaps between the shaped protuberances are filled with foam.

McGuire shows a nesting-resistant sheet material comprising tessellations and patterns of shaped protuberances wherein the gaps in between the protuberances are

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filled with foam (column 16, lines 45-64 and Figure 9). McGuire shows that the patterns of the protuberances are positioned so that there is a gap around each protuberance in such a way that a straight line projected onto the sheet material cuts through at least one of the protuberances and at least one of the gaps (Figures 2, 3, 4). McGuire shows that the foam substance 16 can be filled into the gaps such that the sheet material can define a planar surface (coelevational with the outermost points) (column 16, lines 45-64 and column 17, lines 53-57 and column 1, lines 25-37). McGuire shows that the sheet material can be used for tapes, labels, and other articles and it is conventionally known that such articles can be printed with indicia (column 2, lines 10-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to fill the gaps with foam because McGuire teaches filling with foam helps sheets to cushion packaged materials.

9. Claims 17-18 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Rejection of claims 13, 15 and 16 made under 35 USC 112, first paragraph have been withdrawn due Applicants amendments. Applicants arguments of rejection made

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under 35 USC 112, first paragraph over claims 1-7, 9, 12 and 21-26 are withdrawn due to Applicants cancellation of claims 1-4. The rejection is upheld over claims 5-7, 9, 21-26. Applicant argues Figures 1-4 clearly disclose that the packaging sheet consists of a single material layer. Examiner is not persuaded because Figures 1 and 2 do not show the entire embodiment of the invention. Furthermore, it is not apparent in Figures 3-9 the packaging sheet consists only of a single material layer. For instance, Figures 3 and 6 appear to be more than a single material layer.

Rejection made under 35 USC 102(b) as being anticipated by Barnholtz is withdrawn due to applicants amendments and arguments. Additionally, Rejection made under 35 USC 102(b) as being anticipated by Rudy is withdrawn due to applicants amendments and arguments. Applicant argues Figures 2,3 and 5 of Rudy clearly demonstrate the distance between the uppermost and lowermost levels of the sheet is larger than 5 times a thickness of the material layer. This argument lacks sufficient support. Applicant argues claim 10 is patentable over McGuire because the reference fails to disclose the claimed repeating pattern. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Rudy shows a thermoplastic packaging sheet comprising repeated patterns (tessellations) of rounded shaped protuberances and gaps which are positioned such that any straight lines projected onto the surface of the paper cut through the shaped protuberances and gaps in-between (Figure 1). Also,

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McGuire shows a nesting-resistant sheet material comprising tessellations and patterns of shaped protuberances wherein the gaps in between the protuberances are filled with foam (column 16, lines 45-64 and Figure 9). Applicant argues McGuire fails to disclose the claimed planar surface defined by the shaped protuberances with the foam filled in the gaps. Figures 3-5 of McGuire are depicted as planar surfaces comprising the foam filled in the gaps. Applicant argues McGuire fails to suggest the claimed printed indicia on the planar face. Examiner respectfully disagrees because McGuire shows that the sheet material can be used for tapes, labels, and other articles and it is conventionally known that such articles can be printed with indicia (column 2, lines 10-32). Applicant argues McGuire does not recognize the compression strength as a result effective variable. This argument is moot because McGuire no longer is used over claims 19-20. Applicant argues Rudy cannot maintain by itself the repeating pattern without trapped air. Applicant lacks support for this ascertainment and furthermore, Rudy shows the sheets are laminated and contain air (column 1, lines 15-24).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the

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examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
Art Unit 1774

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

